No. 711,562. Patented Oct. 21, 1902.

A. F. C. GARBEN.

FOLDING TABLE.

(Application filed Oct. 26, 1901.)

(No Model.)

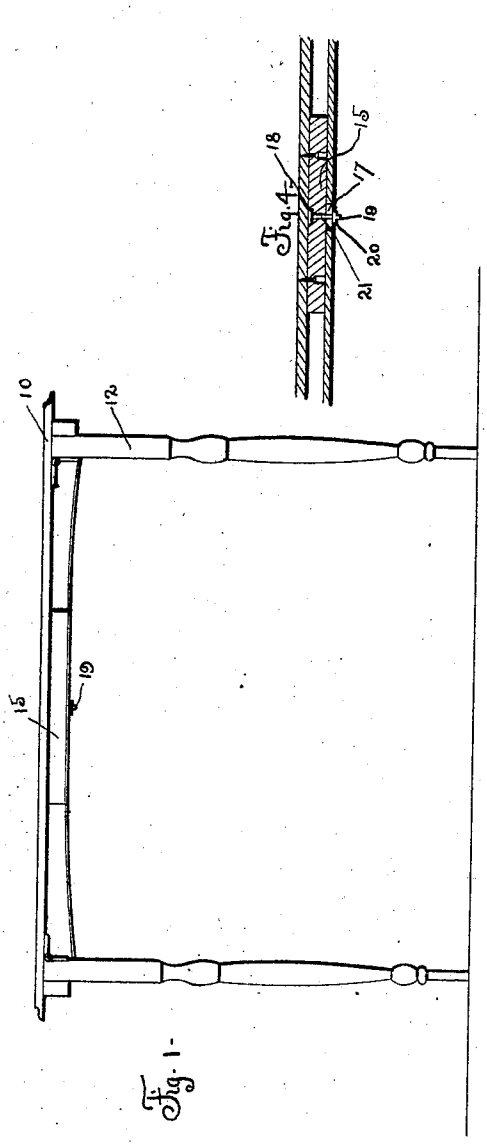


Fig. 1.

Fig. 4.

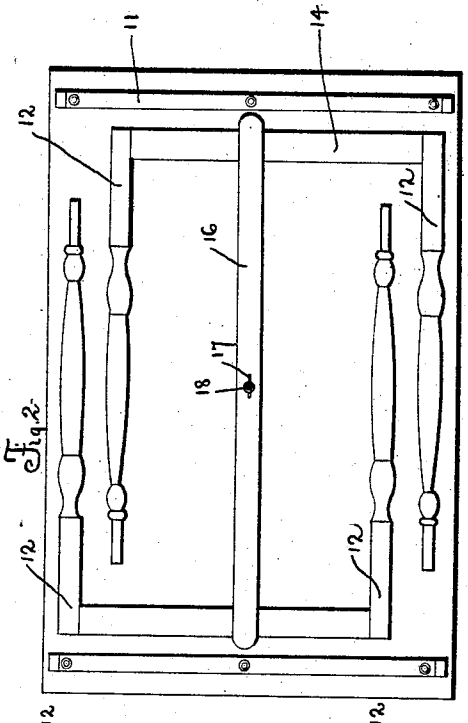


Fig. 2.

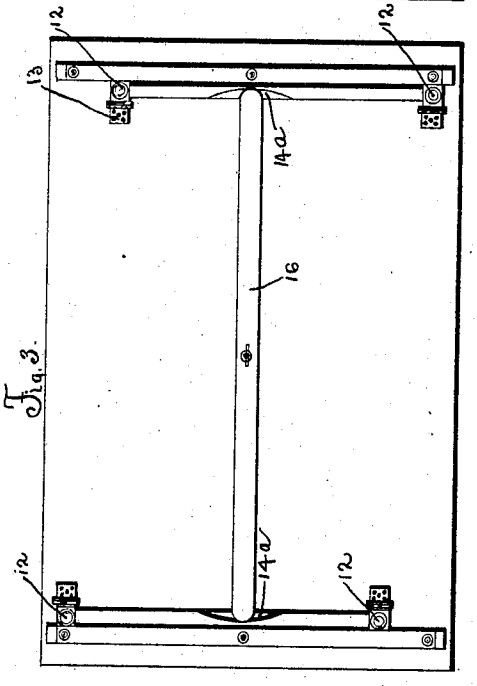


Fig. 3.

Witnesses;
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by Orwig & Lane Attys.

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UNITED STATES PATENT OFFICE.

ADOLPH F. C. GARBEN, OF DES MOINES, IOWA.

FOLDING TABLE.

SPECIFICATION forming part of Letters Patent No. 711,562, dated October 21, 1902.

Application filed October 26, 1901. Serial No. 80,049. (No model.)

To all whom it may concern:

Be it known that I, ADOLPH F. C. GARBEN, a citizen of the United States, residing at Des Moines, in the county of Polk and State of Iowa, have invented certain new and useful Improvements in Folding Tables, of which the following is a specification.

The objects of my invention are to provide a folding table the legs of which can be folded against the under surface of the table, so that it can be stored in a comparatively small space when not in use, and, further, to provide a table that when in position for use will stand firmly on its legs on account of the adjustable locking spring-brace, which I have attached to the under surface of the table, and, further, to provide an adjustable spring-brace that rests against the connecting-pieces which are between the legs at the opposite ends of the table, so that if the wood in the brace or cross-strip shrink by adjusting the spring-brace the legs may still be held firmly in place.

My invention consists in certain details in the construction, arrangement, and combination of the various parts of the device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 shows a side elevation of the entire table. Fig. 2 shows an inverted plan view of the table with the legs folded against the under surface thereof, also showing the way in which the braces hold the legs when in this position against the table. Fig. 3 is an inverted plan view of the table, showing the legs in position for use and the braces in a position holding the connecting-pieces between the legs against the stationary cross-strips at the ends of the table. Fig. 4 shows a detail sectional view of the adjustable spring-brace and means for attaching same to the table.

Referring to the accompanying drawings, I have used the reference-numeral 10 to indicate the top of the table and the reference-numeral 11 to indicate the cross-pieces attached to the under surface of the table and near each end thereof.

The numeral 12 indicates the folding legs, which are hinged by the hinges 13 to the under surface of the table, so that when the table is in position for use the extreme top of these legs 12 will rest against the under surface of the table and the upper outside portion of the legs will rest against the cross-pieces 11. I have provided the pieces 14 for connecting the legs, and on the inner lower edge thereof I have cut away a segment of a circle to form the shoulder 14^a, whose center is in a medial line of the table running lengthwise of the table and is approximately at that point one-half of the distance from the center of the table to one of the cross-pieces 11.

Firmly attached to the under surface of the table and near the central portion thereof is a thin strip of wood or other material 15. Pivotally attached to this strip 15 is a spring-brace 16, having a slot 17 therein and rounded at its end portions. Through the slot 17 and attached to the strip 15 I have placed the pivot 18, having a head portion 19, designed to hold the washer 20 in place on the body portion 21 and against the spring-brace 16. The spring-brace 16 is of such length that the end portions thereof will rest in the curved notches and against the segmental shoulder 14^a and against the inner side of the connecting-pieces 14 when the spring-brace is at right angles to them, so that the legs will be firmly held against the cross-pieces 11. The strip 15, attached to the central portion of the table, is not as thick as the width or thickness of the connecting-pieces 14, so that when the legs are folded against the under surface of the table the spring-brace 16 coming in conjunction with the cross-pieces 14 holds the legs firmly in that position. When the legs are extended from the under surface of the table into a position for use, which is substantially at right angles to the inner surface of the table, the spring-brace does not change its position, except as a leaf-spring at its end portions, so that when the legs reach their position for use the end portions of the spring-brace are drawn into the curved notches and against the shoulder 14^a in the cross-piece 14 and hold the legs in position for use. Supposing the connecting-pieces shrink, the spring-brace 16 is moved in either direction on the pivot 18, and as the radius of said segmental shoulder is less than the radius described by one-half the spring-brace

16 and has its center in the same line as the spring-brace 16 when it is moved in either direction on the pivot 18 it comes into closer contact with the segmental shoulder, and in this manner any movement of the legs is prevented. The slot 17 is to enable the spring-brace to be slidingly adjustable, provided one of the connecting-strips swells or shrinks more than the other.

In practical use and assuming the legs to be in the position shown in Fig. 3 the end portion of the spring-brace 16 will rest against the segmental shoulder 14ª, and because the brace is attached to the under surface of the top of the table at its central portion only it can be sprung below the segmental shoulder 14ª and below the connecting-pieces by taking hold of it at its end portion. By so springing the ends of the spring-brace away from the connecting-pieces the legs can be easily folded against the under surface of the table, as shown in Fig. 2. When the legs reach this position, by the operator releasing his hold on the end of the spring-brace it will again be drawn against the connecting-pieces and in this manner hold the legs against the under surface of the table. When the legs are in position for use, as shown in Fig. 3, and assuming that for some reason the spring-brace 16 does not come in contact with the segmental shoulder 14ª when in the circular notch, the spring-brace can be moved in either direction until it comes into close contact therewith and holds the legs firmly against the cross-piece 11. Assuming that one of the connecting-pieces 14 shrink and at the same time the other cross-piece swells, the spring-brace can be adjusted to the connecting-pieces by moving the spring-brace longitudinally on the pivot 18 because of the slot 17 in said spring-brace.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States therefor, is—

1. In a folding table the combination of a body or top portion having cross-pieces firmly attached to the under surface of the top near each end of the table, two pairs of legs hinged to the under surface of the body portion in such a manner that the side of the upper portion of the legs will rest against the inner side of said cross-pieces, connecting-pieces between said legs, a shoulder on each of the connecting-pieces, a spring-brace pivotally and slidingly attached to the under surface of the table near its central portion, the end portions of which come in contact with the connecting-pieces between the legs and hold the legs in place when the legs are folded against the table and rest against the shoulders when the table-legs are in position for use for the purposes stated.

2. In a folding table the combination of a top portion, cross-pieces firmly attached to the under surface of the top portion and near each end thereof, legs having connecting-pieces between them hinged to the under surface of the top portion of the table near the cross-pieces, a spring-brace to hold the legs in either a folded or extended position and having a slot in its central portion, a strip firmly attached to the under surface of the top portion, a pivot having a head thereon, and a washer to rest against said head upon the pivot, said pivot being passed through the slot in the spring-brace to hold the spring-brace to the strip for the purposes stated.

3. In a folding table, a top portion, legs hinged to the under surface of the top portion near the ends thereof having connecting-pieces between them, cross-pieces attached to the under surface of the top portion to limit the movement of said legs, a spring-brace having rounded ends pivotally and slidingly attached by its central portion to the central portion of the under surface of the top portion to rest against said connecting-pieces when the legs are folded against the under surface of the table, a segmental shoulder in said connecting-pieces whose radius is less than that described by the spring-brace on its pivot and whose center is in a line between the shoulders designed to engage the spring-brace and hold the legs firmly in their extended position for the purposes stated.

4. In a folding table the combination, of a top portion having the cross-pieces 11 firmly attached to the under surface of the top portion designed to limit the movement of the legs 12, legs hinged to the under surface of the top portion, connecting-pieces 14 between the legs having a segmental shoulder 14ª therein, a spring-brace 16 having a slot in its central portion pivotally attached to the under surface of the table, a headed pivot 18 having the washer 20 thereon, said spring-brace to rest against the connecting-pieces 14 when the table-legs are folded against the under surface of the table to hold the legs in position, said spring-brace also to engage the segmental shoulder 14ª when the legs are in their extended position and to hold them firmly in this position for the purposes stated.

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Witnesses:
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